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TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

July 28, 2006

TO: Internal File

THRU: Pamela Grubaugh-Littig, Permit Supervisor

FROM: James D. Smith, Environmental Scientist, Team Lead

RE: Mill Fork West Extension LBA/Federal Lease, Task No. 2544, PacifiCorp, Deer Creek Mine, C0150018

SUMMARY:

PacifiCorp has applied for a federal LBA to access previously unleased coal adjacent to the Mill Fork state lease. A new federal lease, UTU-84825, is scheduled to be issued on August 1, 2006 and it is presumed that PacifiCorp, through Energy West Mining Company, is the only bidder. The proposed Mill Fork West Extension LBA/Federal Lease amendment is to incorporate the new federal lease into the Deer Creek Mine MRP and modify the mine layout to extend longwall panels into the new lease. Because it involves a new federal lease, this permit modification requires approval by the Secretary of the Interior.

When the Mill Fork lease was originally outlined by the BLM, the west boundary was based roughly on the location of the Joes Valley Fault projected by the USFS in 1997. The coal tract was transferred to SITLA as part of an exchange of federal and state lands and minerals under the Utah Schools and Land Exchange Act of 1998 (Public Law 105-335). PacifiCorp obtained the lease, ML-48258, from SITLA in 1999. In 2005, PacifiCorp made a new determination of the location of the Joes Valley Fault based on topography, aerial photography, resistivity and IP surveys, and in-mine horizontal drilling information. The new location for the fault is several hundred feet west of the one used to define the Mill Fork lease, and it became evident that a considerable volume of federal coal between the fault and the west boundary of the Mill Fork lease would become isolated and unrecoverable if the Deer Creek Mine plan were not modified to include recovery of this coal.

The BLM has already granted an exploration license for the Mill Fork West Extension LBA area with the intent of allowing PacifiCorp to build gate roads, bleeders, and longwall set-up rooms in the federal coal. However, longwall mining cannot be done and coal recovered from mine development cannot be sold until this coal has been leased and the area added to the state permit.

The proposed amendment is an IBC that will add 214 acres to the Deer Creek Mine permit, increasing the permitted area by 9.6 %. It is a change to the underground operations only

and will not involve any new surface disturbance. The Permittee included the West Extension LBA area when they collected baseline data for the original Mill Fork Extension.

The main hydrologic concern when the Mill Fork Extension was permitted was that mining would intercept Joes Valley Fault and divert surface and ground water from Joes Valley. This is still the main concern with the Mill Fork West Extension. Stipulation 19 of the Joint Decision Notice prohibits full-extraction mining within a 22 degree angle of draw, projected eastward from the surface expression of the Joes Valley fault: mining that could cause subsidence will not be permitted within the buffer zone.

Ground-water samples collected in and near the Joes Valley Fault at the Crandall Canyon Mine indicated a mean residence time of 2,000 to 5,000 years, although one sample contained a small amount of tritium, suggesting some modern water infiltrates from the surface and mixes with older water stored in fractures. The Permittee states the data indicate that mining near Joes Valley Fault could intercept modern water recharged from the surface, but the so-called active zone near the fault will also yield deeper, older water. The data also indicate that surface- and ground-water systems are not hydraulically connected, so no impacts to surface waters are anticipated from dewatering of perched systems in the coal seams and adjacent strata (Volume 12, Section R645-301-624; Section R645-301-700, Appendix B).

The new information that now indicates Joes Valley Fault is several hundred feet farther to the west does not establish any reason to alter these conclusions, and mining in the Mill Fork West Extension, with the mandated buffer zone, should not damage surface- and ground-water systems or water supplies in and adjacent to Joes Valley.

Permittee's Action	Dated	DOGM's Action	Dated
Original submittal	05/30/2006	Assigned Task # 2544	
		Tech Memo	07/28/2006

TECHNICAL ANALYSIS:

ENVIRONMENTAL RESOURCE INFORMATION

Regulatory Reference: Pub. L 95-87 Sections 507(b), 508(a), and 516(b); 30 CFR 783., et. al.

GEOLOGIC RESOURCE INFORMATION

Regulatory Reference: 30 CFR 784.22; R645-301-623, -301-724.

Analysis:

The Permittee has updated the entire Geology Section of Volume 12 to include lease UTU-84825. Most changes are minor and merely incorporate lease UTU-84285 into the existing discussion. The main change to the text is the discussion of the location of Joes Valley Fault. Figures GF-2, GF-3, and GF-4 have been added.

Figure GF-2 shows five interpretations, dating back to 1955, of the projected location of the Joes Valley Fault. The evolution of these interpretations is discussed in Volume 12, Section R645-301-620, C. The latest interpretation - done in 2005 by Ken Fleck, a professional geologist working for Energy West - is based on topography, aerial photography, resistivity and IP surveys, and in-mine horizontal drilling. It is this latest interpretation that indicted there is enough coal west of the Mill Fork lease to warrant the new federal lease UTU-84825 and extension of the mine into this lease. Additional details are shown on Figures GF-3 and GF-4.

Findings:

Information provided in the plan meets the Geologic Resource Information requirements of the regulations.

HYDROLOGIC RESOURCE INFORMATION

Regulatory Reference: 30 CFR Sec. 701.5, 784.14; R645-100-200, -301-724.

Analysis:

The Permittee has updated the entire Hydrologic Section of Volume 12. However, most changes are minor and merely incorporate lease UTU84285 into the existing discussion.

Water Replacement

The Permittee concludes that the probability of subsidence causing impacts or adverse affects to surface-water systems in and adjacent to the Mill Fork Lease and Mill Fork West Extension is small (Volume 12, Section R645-301-728, E.; and Section R645-301-728, I.), but because a possibility exists, the water replacement rules apply.

State-appropriated water supplies in and adjacent to the Mill Fork West Extension, identified in Section R645-301-600, Appendix C of Volume 12, are covered by the water replacement regulations. Replacement of State-appropriated water supplies is discussed briefly in Section 731.530 in Volume 12, which refers to Table MFHT-2. Information in Table MFHT-2 constitutes a plan sufficient to satisfy the water replacement requirements in the Coal Mining Rules.

The Permittee, in cooperation with Huntington City, Elmo City, Cleveland City, and CVSSD, developed a mitigation plan and agreement, signed in July 2004. As part of that agreement, the Permittee constructed a water treatment plant near the existing Huntington City

plant in Huntington Canyon. A copy of the agreement is in Appendix D of Volume 9 (Volume 12, Section R645-301-721, A.15.b (2)).

Baseline Information

Ground-Water Information

Monitoring locations are on map HM-1 in Volume 9. Data on water quality and quantity, sufficient to demonstrate seasonal variation and water usage, are in Volume 9, Volume 12, Annual Reports, and the Division's database.

Volume 9, Section R645-301-721.A contains a description of the ownership of existing wells, springs, and other ground-water resources, including seasonal quality and quantity of ground water and usage. Tables in Volume 9 summarize water rights, mode of occurrence, and water quality for ground water. For the Mill Fork Lease and Mill Fork West Extension areas, locations of known seeps and springs and water rights are shown on Drawing MFS1832D (Hydrology Section, Volume 12) and ground-water rights are described in some detail at Section R645-301-721, A.15 and in Appendix C of Volume 12. Spring UJV 213, associated with water right a21560, is in the no-second mining buffer zone (Drawing MFS1832D). Drawing MFS1866D shows UJV 213 is within the zone of potential subsidence from mining the Hiawatha Seam, situated near both the end of a longwall panel and the projected limit of subsidence. Although the thick overburden (Drawing MFS1825D) makes surface impacts from subsidence unlikely, this spring is located in an area where the potential for surface cracking is greatest.

Criteria used to select springs for monitoring are in Section R645-301-731.200 A.1 of Volume 12. Baseline and operational parameters are in Appendix A of Volume 9.

The Permittee states that extensive research has established that the surface- and ground-water systems are not hydraulically connected, so no impacts to surface waters are anticipated from dewatering of perched systems in the coal seams and adjacent strata (Volume 12, Section R645-301-624). This research is summarized in *Surface-water and ground-water investigation of the Mill Fork Lease area, Emery County, Utah*, by Mayo and Associates, October 24, 2001 (Volume 12, Section R645-301-700, Appendix B).

Joes Valley Fault

Three samples of water associated with the fault were collected in the Crandall Canyon Mine, and radiocarbon age and tritium content were measured (Volume 12, Section R645-301-700, Appendix B). In-mine drilling in the Deer Creek Mine encountered the fault in two locations, indicated by small volumes of flowing sand and water (Volume 12, Section R645-301-620, C.). Stipulation 19 in the coal lease does not allow full extraction mining within a 22 degree angle-of-draw of the fault (Volume 12, Section R645-301-728, I.4.a.).

Surface Water Information

Surface-water resources are described in Volume 9, Section R645-301-721, B. and also in Volume 12. Quality and quantity data sufficient to demonstrate seasonal variation and water usage are in Volume 9, the Annual Reports, and the Division's database. Locations for Deer Creek Mine UPDES discharge points are shown on HM-1 in Volume 9; there is no UPDES discharge anywhere in or adjacent to the Mill Fork tract, including the Mill Fork West Extension LBA addition.

Names and locations of surface water bodies within the Mill Fork Lease permit and adjacent areas, including the Mill Fork West Extension, are shown on several maps in Volume 12, including Plate 1 by Mayo and Assoc. and Drawing MFS1830D – Hydrologic Map in the Hydrology Section and Drawing MFS1839D - Pre-subsidence Survey Map in the Engineering Section. There are no known water-supply intakes for current users of surface waters flowing into, out of, and within the area.

Baseline Cumulative Impact Area Information

The Division prepared a CHIA for East Mountain in 1994, and it has been updated as needed. The Division has obtained hydrologic and geologic information for the cumulative impact area from federal or state agencies and mine operators. The Mill Fork West Extension LBA will not require an update of the CHIA because it is already included in the CIA.

Probable Hydrologic Consequences Determination

The PHC determination compiled by Mayo and Associates for the Mill Fork Extension is in Volume 12, Hydrology Appendix B. This includes the Mill Fork West Extension LBA area. A discussion of the PHC is in Volume 12, Section R645-728.

Ground-water samples collected in and near the Joes Valley Fault at the Crandall Canyon Mine indicated a mean residence time of 2,000 to 5,000 years, although one sample contained a small amount of tritium, suggesting some modern water infiltrates from the surface and mixes with older water stored in fractures. The Permittee states that the data indicate mining near Joes Valley Fault could intercept modern water recharged from the surface, but the so-called active zone near the fault will also yield deeper, older water. The data also indicate that surface- and ground-water systems are not hydraulically connected, so no impacts to surface waters are anticipated from dewatering of perched systems in the coal seams and adjacent strata (Volume 12, Section R645-301-624; Section R645-301-700, Appendix B).

The new information that now indicates Joes Valley Fault is several hundred feet farther to the west does not establish any reason to alter these conclusions, and mining in the Mill Fork West Extension, with the mandated buffer zone, should not damage surface- and ground-water systems or water supplies in and adjacent to Joes Valley. However, because of its location near both the end of a longwall panel and the limit of possible subsidence, and because it is associated with a water right, spring UJV 213 needs to be monitored before, during, and after mining so that

a determination can be made either that the mining caused no contamination, diminution, or interruption of the water supply or that water replacement is required.

If faulting is encountered during bleeder development, the Permittee will terminate mining and relocate the entries. To deal with ground water intercepted by mining near the Joes Valley Fault (presumably large flows only), the Permittee has developed an emergency plan that is outlined at the end of Volume 12, Section R645-301-728, I.4.a.(2).

Groundwater Monitoring Plan

The detailed Hydrologic Monitoring Program in Volume 9 identifies monitoring locations adjacent to the Mill Fork West Extension LBA, the monitoring schedule, and water-quality analysis parameters.

The USFS holds water right 93-1576 (change a21560) on the spring identified by the Permittee as UJV 213, which lies within the no-second mining buffer zone (Drawings MFU1825D and MFS1832D). Drawing MFS1866D shows it is within the zone of potential subsidence from mining the Hiawatha Seam, located near both the end of a longwall panel and the projected limit of subsidence. Although the thick overburden (Drawing MFS1825D) makes surface impacts from subsidence unlikely, this state-appropriated water supply is located in an area where the potential for surface cracking is greatest. The Permittee needs to monitor flow at this source for an appropriate period of time before, during, and after mining so that a determination can be made either that the mining caused no diminution or interruption of the water supply or that water replacement is required. Mining in the vicinity of this spring isn't projected to begin until 2011 (MFU1840D) so there is no urgency to monitor immediately, but monitoring should be timed to establish sufficient baseline before mining begins.

Surface-Water Monitoring Plan

There are no significant surface-water resources in the Mill Fork West Extension. The Hydrologic Monitoring Program in Volume 9 identifies monitoring locations adjacent to the Mill Fork West Extension, the monitoring schedule, and water-quality analysis parameters.

Indian Creek, a perennial stream, is the nearest surface water resource. Surface–water monitoring sites are marked on Map MFS1851D. Flow and water-quality have been measured since 1996 and the data are in the hydrologic database. Information is sufficient to demonstrate seasonal variations of flow and water quality.

Findings:

Information provided in the plan does not meet the Hydrologic Resource Information requirements of the regulations. Before the Division can approve this amendment, the Permittee needs to provide the following in accordance with:

R645-301-731.210, The Permittee needs to monitor flow at UJV 213 (water right 93-1576, change a21560) for an appropriate period of time before, during, and after mining so that a determination can be made either that the mining caused no diminution or interruption of the water supply or that water replacement is required.

MAPS, PLANS, AND CROSS SECTIONS OF RESOURCE INFORMATION

Regulatory Reference: 30 CFR 783.24, 783.25; R645-301-323, -301-411, -301-521, -301-622, -301-722, -301-731.

Analysis:

Coal Resource and Geologic Information Maps

The Permittee has updated several of the maps in Volume 12 that identify local geologic and hydrologic features. Drawing MFU1823D shows the revised projected location of Joes Valley Fault and the no-second mining buffer zone in relation to surficial geology. It also shows locations and elevations on the surface of all exploration drill holes and test wells within the Mill Fork and Mill Fork West Extension areas and the coal crop lines for the Hiawatha and Blind Canyon Seams.

Drawing MFS1824D (Blind Canyon Overburden), MFS1825D (Hiawatha Overburden), MFS1826 (Blind Canyon – Hiawatha Interburden), MFS1827D (Blind Canyon Structure Contour), and MFS1828D (Hiawatha Structure Contour) show the projected mine layouts in relation to the new projections for the Joes Valley Fault and no-second mining buffer zone. The Hiawatha workings have been updated on MFS1825D, MFS1826D, and MFS1828D, but the Blind Canyon workings on MFS1824D, MFS1826D, and MFS1827D have not been updated to match those on Drawing MFU1841D.

Monitoring and Sampling Location Maps

HM-1, the Water Monitoring Location Map is in Volume 9.

Subsurface Water Resource Maps

Areal and vertical distribution of the formations that contain perched waters are shown on updated Drawings MFU1823D and MFU1829D in the Geology section of Volume 12.

Surface Water Resource Maps

There are no known water-supply intakes for current users of surface waters flowing into, out of, and within the Deer Creek Mine hydrologic area. No surface waters will receive discharges from affected areas in the Mill Fork lease and Mill Fork West Extension.

Locations of surface water bodies within the Mill Fork lease and adjacent areas are shown on Mayo's Plate 1 and updated Drawings MFS1830D and MFS1839D in Volume 12 and HM-1 in Volume 9.

Contour Maps

Several maps show the existing contours of the Mill Fork Lease area, including updated Drawing MFS1839D, Deer Creek Mine Mill Fork Lease ML-48258 Pre-Subsidence Survey Map in Volume 12. The map is at a scale of 1 inch = 1,000 ft and has 100-ft contours.

Findings:

Information provided in the plan meets the Maps, Plans, and Cross Sections of Resource Information does not meet the requirements of the regulations. Before the Division can approve this amendment, the Permittee needs to provide the following in accordance with:

R645-301-121.200, -623.300, The Permittee needs to update projections for the mine workings on Drawings MFS1824D (Blind Canyon Overburden), MFS1826 (Blind Canyon – Hiawatha Interburden), MFS1827D (Blind Canyon Structure) to match those on Drawing MFU1841D.OPERATION PLAN

COAL RECOVERY

Regulatory Reference: 30 CFR 817.59; R645-301-522.

Analysis:

Mining in the Mill Fork West Extension will be an expansion of operations in the Mill Fork Extension. The Permittee will be using longwall mining for the main extraction of coal, with continuous miners used for development of set-up rooms, gate roads, and bleeders.

Findings:

Information provided in the plan meets the Coal Recovery requirements of the regulations.

HYDROLOGIC INFORMATION

Regulatory Reference: 30 CFR Sec. 773.17, 774.13, 784.14, 784.16, 784.29, 817.41, 817.42, 817.43, 817.45, 817.49, 817.56, 817.57; R645-300-140, -300-141, -300-142, -300-143, -300-144, -300-145, -300-146, -300-147, -300-147, -300-148, -301-512, -301-514, -301-521, -301-531, -301-532, -301-533, -301-536, -301-542, -301-720, -301-731, -301-732, -301-733, -301-742, -301-743, -301-750, -301-761, -301-764.

Analysis:

General

The Permittee commits that in no case will second mining or full-extraction mining take place in the Joes Valley Fault buffer zone (Volume 12, Section R645-301-728, I.4.a.(2)). The Permittee plans to leave at least 50 ft of solid coal between bleeder entries and the fault.

Gateroad development will be stopped 200 ft short of the projected fault location and horizontal drilling will be done to more exactly determine the fault's location. Casing will be cemented into the boreholes to help control any ground water that is encountered, and the Permittee will immediately notify the Division and USFS of inflows greater than 50 gpm. Holes that flow a "significant" amount of water will be cemented before abandonment.

If faulting is encountered during bleeder development, the Permittee will terminate mining and relocate the entries. To deal with ground water intercepted by mining near the Joes Valley Fault, the Permittee has developed an emergency plan that is outlined at the end of Volume 12, Section R645-301-728, I.4.a.(2).

Groundwater Monitoring

Appendix A of Volume 9 contains the complete water-monitoring plan for the Permittee's mines. There are no changes to this plan in the Mill Fork West Extension LBA amendment and no new ground-water monitoring sites associated with the Mill Fork West Extension LBA extension.

The USFS holds water right 93-1576 (change a21560) on the spring identified by the Permittee as UJV 213, which lies within the no-second mining buffer zone (Drawings MFU1825D and MFS1832D). Bleeders, gateroads, and setup rooms are projected under the area surrounding this spring and it is within the zone of potential subsidence from mining the Hiawatha Seam (Drawing MFS1866D). The Permittee needs to monitor flow at this source for an appropriate period of time before, during, and after mining so that a determination can be made either that the mining caused no diminution or interruption of the water supply or that water replacement is required. Mining in the vicinity of this spring isn't projected to begin until 2011 (MFU1840D) so there is no urgency to monitor immediately, but monitoring should be timed to establish sufficient baseline before mining begins.

For boreholes drilled from within the mine, casing will be cemented into the boreholes to help control any ground water that is encountered and the Permittee will immediately notify the Division and USFS of inflows greater than 50 gpm. Holes that flow a "significant" amount of water will be cemented before abandonment. The MRP already contains a commitment that the Permittee will monitor flows greater than 5 gpm that persist after operational activities progress beyond the area of the inflow (Volume 12, Section R645-301-200, A.2.).

Surface Water Monitoring

Appendix A of Volume 9 contains the complete water-monitoring plan for the Permittee's mines. There are no changes to this plan in the Mill Fork West Extension LBA amendment. There are no significant surface-water resources associated with the Mill Fork West Extension, and no new surface- water monitoring is proposed.

Diversions: General

No streams will be diverted in the Mill Fork West Extension.

Stream Buffer Zones

The Mill Fork West Extension does not involve disturbance of any land within 100 ft of a perennial or intermittent stream.

Sediment Control Measures

No sediment control structures are planned for coal mining operations the Mill Fork Lease and Mill Fork West Extension. Coal mining operations in these areas should not impact existing sediment control structures.

Siltation Structures: General

No siltation structures are planned for coal mining operations the Mill Fork Lease and Mill Fork West Extension. Coal mining operations in these areas should not impact existing siltation structures.

Siltation Structures: Sedimentation Ponds

No sedimentation pond is planned for the Mill Fork Lease and Mill Fork West Extension.

Siltation Structures: Other Treatment Facilities

No Other Treatment Facilities are planned for coal mining operations the Mill Fork Lease and Mill Fork West Extension. Mining operations in the Mill Fork Lease and Mill Fork West Extension should have no impact on existing treatment structures.

Discharge Structures

No discharge structures are planned for coal mining operations in the Mill Fork Lease and Mill Fork West Extension. Mine operations in the Mill Fork Lease and Mill Fork West Extension should have no impact on existing discharge structures.

Impoundments

No impoundments are planned for the areas covered by the Mill Fork Lease and Mill Fork West Extension.

Ponds, Impoundments, Banks, Dams, and Embankments

No ponds, impoundments, banks, dams, or embankments are planned for the Mill Fork Lease and Mill Fork West Extension.

Water Replacement

The Permittee commits to promptly replace any State-appropriated water supply that is contaminated, diminished or interrupted by Underground Coal Mining and Reclamation Activities conducted after October 24, 1992, if the affected water supply was in existence before the date the Division received the permit application for the activities causing the loss, contamination or interruption.

Replacement of State-appropriated water supplies is discussed briefly in Section 731.530 in Volume 12, which refers to Table MFHT-2. Information in Table MFHT-2 constitutes a plan sufficient to satisfy the water replacement requirements in the Coal Mining Rules.

The Permittee, in cooperation with Huntington City, Elmo City, Cleveland City, and CVSSD, developed a mitigation plan and agreement, signed in July 2004. As part of that agreement, the Permittee constructed a water treatment plant near the existing Huntington City plant in Huntington Canyon. A copy of the agreement is in Appendix D of Volume 9 (Volume 12, Section R645-301-721, A.15.b.(2)).

The baseline hydrologic and geologic information required in R645-301-700 will be used to determine the impact of mining activities upon the water supply (Section 731.530). The Permittee needs to monitor flow at UJV 213 (water right 93-1576, change a21560) before, during, and after mining so that a determination can be made either that the mining caused no contamination, diminution, or interruption of the water supply or that water replacement is required.

Findings:

Information provided in the plan does not meets the Operational Hydrologic Information requirements of the regulations. Before the Division can approve this amendment, the Permittee needs to provide the following in accordance with:

(Repeat) R645-301-731.210, The Permittee needs to monitor flow at UJV 213 (water right 93-1576, change a21560) for an appropriate period of time before, during, and after mining so that a determination can be made either that the mining

caused no diminution or interruption of the water supply or that water replacement is required.

MAPS, PLANS, AND CROSS SECTIONS OF MINING OPERATIONS

Regulatory Reference: 30 CFR Sec. 784.23; R645-301-512, -301-521, -301-542, -301-632, -301-731, -302-323.

Analysis:

Mine Workings Maps

The Permittee has submitted maps showing the underground mine working and projected workings within the Mill Fork Lease and Mill Fork West Extension LBA. Updated Maps MFU1840D and MFU1841D project the mining sequence through 2020 for the Hiawatha Seam and 2015 for the Blind Canyon Seam. Maps are PE certified.

Drawing MFS1824D (Blind Canyon Overburden), MFS1825D (Hiawatha Overburden), MFS1826 (Blind Canyon – Hiawatha Interburden), MFS1827D (Blind Canyon Structure Contour), and MFS1828D (Hiawatha Structure Contour) show the projected mine layouts in relation to the new projections for the Joes Valley Fault and no-second mining buffer zone. The Hiawatha workings have been updated on MFS1825D, MFS1826D, and MFS1828D, but the Blind Canyon workings on MFS1824D, MFS1826D, and MFS1827D have not been updated to match those on Drawing MFU1841D.

Monitoring and Sampling Location Maps

HM-1, the Water Monitoring Location Map, is in Volume 9. For the Mill Fork lease and adjacent Mill Fork West Extension LBA, elevations and locations of monitoring stations used to gather data on water quality and quantity are on Plate 1 by Mayo and Assoc. and updated Drawings MFS1830D and MFS1839D.

Certification Requirements

All maps and cross-sections that are required to be certified have been certified.

Findings:

Information provided in the plan meets the Maps, Plans, and Cross Sections requirements of the regulations. Before the Division can approve this amendment, the Permittee needs to provide the following in accordance with:

(Repeat) R645-301-121.200, -623.300, The Permittee needs to update projections for the mine workings on Drawings MFS1824D (Blind Canyon Overburden), MFS1826

(Blind Canyon – Hiawatha Interburden), MFS1827D (Blind Canyon Structure) to match those on Drawing MFU1841D.RECLAMATION PLAN

HYDROLOGIC INFORMATION

Regulatory Reference: 30 CFR Sec. 784.14, 784.29, 817.41, 817.42, 817.43, 817.45, 817.49, 817.56, 817.57; R645-301-512, -301-513, -301-514, -301-515, -301-532, -301-533, -301-542, -301-723, -301-724, -301-725, -301-726, -301-728, -301-729, -301-731, -301-733, -301-742, -301-743, -301-750, -301-751, -301-760, -301-761.

Analysis:

Hydrologic Reclamation Plan

There is no planned surface disturbance in the Mill Fork West Extension LBA area. The Mill Fork West Extension does not require any changes to the Hydrologic Reclamation Plan outlined in the MRP.

Water Monitoring

The Permittee has not added new water-monitoring sites associated with the Mill Fork West Extension LBA extension. UJV 213 should be monitored until it is determined there has been no contamination, diminution, or interruption of this water supply due to coal mining. Such monitoring may extend into the reclamation period for the Deer Creek Mine.

Diversions

There are no diversions in or adjacent to the Mill Fork Lease, including the Mill Fork West Extension LBA area.

Findings:

The Reclamation Plan Hydrologic Information does not meet the requirements of the R645 Rules. Before the Division can approve this amendment, the Permittee needs to provide the following in accordance with:

(Repeat) R645-301-731.210, The Permittee needs to monitor flow at UJV 213 (water right 93-1576, change a21560) for an appropriate period of time before, during, and after mining so that a determination can be made either that the mining caused no diminution or interruption of the water supply or that water replacement is required.

CUMULATIVE HYDROLOGIC IMPACT ASSESSMENT

Regulatory Reference: 30 CFR Sec. 784.14; R645-301-730.

Analysis:

This amendment is not a significant revision to the MRP. This amendment does not require that the Division redo or update the CHIA determination.

Findings:

The current CHIA determination meets the requirements of the R645 Rules.

RECOMMENDATIONS:

The proposed amendment cannot be approved until the deficiencies described above are addressed satisfactorily.

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